Mathematical problem solving game

Abstract of the disclosure

In accordance with the present invention, a mathematical problem solving game, has a specialized deck of cards, each card having an upper face providing a display of mathematical questions, positioned one above the other and coded to indicate their required skill level, each in a fixed format of four calculation numbers and one underlined solution number, whereby, the answer to the question is in a fixed format requiring the four calculation numbers to be divided into two sums, calculated to form two answers that can be formed into a third sum having an answer that is equal to the underlined solution number of the displayed question. A simple example:

Solution number $\underline{2}$ calculation numbers 2, 1, 4, 3, answer 2-1 =1   4-3=1   1+1=$\underline{2}$

To initiate the game a card is openly displayed and players earn points by being the first to declare a correct answer.

FIELD OF THE INVENTION

The present invention relates to a multi skill level mathematical problem solving game and more particularly to a game that has unlimited players competing to be the first to solve a fixed format mathematical question, rules of the game provide means of scoring points and strategies for maximizing the points earned.

A specialized deck of cards has questions displayed on each specialized·playing card face, each of the said questions being identified to indicate the skill level required to formulate the correct answer This multi-skill level feature creates a capability for players of a variety of skill levels to compete.

While the present invention relates to a deck of cards, it also envisages such a game that is adaptable to game boards, random number selection devices and computers.

BACKGROUND OF THE INVENTION

We are repeatedly reminded of how computers are detracting from the mathematical skill

levels of society as a whole and children in particular, thus there is a need for an amusing and competitive card game which also enhances mathematical skills.

With respect to educational card games, up to the present time, players have been limited to games that have not been structured to increase mathematical skills with a specialized card deck. In general, educational card games have been limited to four types:

1. Memory retention games. These are limited to developing the memory.
2. Games that reward for identifying word meanings. This is excellent for language enhancement but fails to enhance mathematical skills.
3. Games that involve the use of numbers on the cards to make a decision related to the optimum card to play. These are excellent for addition or subtraction but are limited in true mathematical skill development.
4. Games that require mathematical calculations with the use of standard playing cards, however they lack the structure and competitiveness of using the specialized playing cards and the rules of the present invention.

Educational card games are well known in the prior art, of particular reference to the present invention are as follows:

U.S. Pat. 20030234493 of Frieman, Shlomo Ruvane issued Dec 25th 2003. Specifically designed to teach young children an alphabet or other basic skills.

U.S. Pat. 20030168809 Richardson Jeff September !!th 2003 provides a game that uses pieces similar to the well known domino game with a requirement to add and subtract numbers while not challenging mathematical skills.

SUMMARY OF THE INVENTION

It is the object of the present invention to provide a mathematical problem solving game that is fun to play. It is a further object of the present invention to provide such a game, providing a plurality of skill levels wherein means for competing with the mixed skill levels of children and adults exist.

In accordance with the present invention a mathematical problem solving game

is provided of the type comprising of a specialized deck of cards, each card face displaying a number of unique mathematical questions, numbered coding denotes the specific skill level required to solve the unique mathematical question.

Thus the ability for players to select questions within their skill limits has been provided.

It is a further accordance of the present invention to provide a fun and competitive mathematical game.

The said mathematical game is started by a single card being placed face up, in a location that simultaneously displays the aforementioned mathematical questions to an unlimited number of players, each of whom can earn points by being the first player to solve the question identified by a pre-determined skill level code.

Players may sit on both sides of the dealer to obtain optimum orientation related to the displayed specialized card.

Each mathematical question is in a fixed format of four calculation numbers and one underlined solution number, whereby the four calculation numbers must be divided into two sums calculated to have answers, that can be combined to form a third sum, comprising an answer that equals the solution number of the displayed mathematical question.

Addition, subtraction, division and multiplication may be required to formulate said correct solution.

To increase fun and competition, a percentage of questions do not have a solution and a valid declaration of "No solution can be found" can be made.

Players will be awarded points for the following:

1. The first player to declare "Solved it." and provide a correct solution.

2. A player will earn double point for a correct solution after a "No solution." has been declared.

3 Should a player declare "Solved it." then fail to provide a correct answer, remaining players will be awarded a point..

A timing device may be used to limit the time available to find a correct answer.

Thus the requirement for a competitive and fun game has been met.

BRIEF DESCRIPTION OF THE DRAWINGS.

Figure 1 Depicts the upper face of a specialized playing card within the scope of the present invention whereby a variety of unique mathematical questions are displayed together with a code that denotes the skill level required to formulate a correct answer for each unique mathematical question.

A sample solution has been temporaraly added in italics below each displayed mathematical question to enhance this patents clarity of explanation of the required fixed mathematical question-solving format.

Figure 2 Depicts the upper face of a specialized playing card within the scope of the present invention whereby a variety of unique mathematical questions are displayed together with a code that denotes the skill level required to formulate a correct answer for each unique mathematical question.

DETAILED DESCRIPTION OF THE INVENTION

With respect to Figure 1. Specialized playing cards (1) each display within the scope of the present invention, unique mathematical questions (2) consisting of four calculation numbers (3) and one underlined solution number (4) with skill levels required to solve the unique mathematical questions (2) complete solution (5)(6), being numerically identified as a skill level (7)(8)(9)(10).

Players are required to solve the unique mathematical questions, (2) by creating two sums (5) each of the two sums (5) to consist of two numbers in a manner that utilizes each of the four calculation numbers (3) a single time, with the object that the resulting answers to the two sums (5) can be formed into a third two number sum, (6) whereby the answer to the third two number sum (6) equals the underlined solution number (4).

The level of skill required to solve the unique mathematical question increases progressively as the skill level numbers increase. Skill level 1 (7) unique mathematical questions (2) are of a simple nature.

Per example illustrated in figure1. Skill level 1, (7) Calculation numbers (3) 4,2,3,1 provided for correct answer formulation, two sums are created from the calculation numbers (3) 4+2=6 (5) 3+1=4 (5) the two answers of the two sums (5) are then used to create a third sum 6-4=2 (6) thus the answer of 2 for the third sum (6) equals the solution number 2 the complete unique mathematical question (2) answer being 4+2=6(5) 3+1=4 (5) 6-4=2 (6)

Per example illustrated in figure1. Skill level 2, (8) Calculation numbers (3) 6,3,8,4 Solution number (4) = 6 The complete unique mathematical question (2) answer being 6/3=2(5) 8-4=4 (5) 2+4=6 (6)

Per example illustrated in figure 1. Skill level 3 (9) Calculation numbers (3) 3,4,7,2. Solution number (4) 9 The complete unique mathematical question (2) answer being 3x2=6(5) 7-4=3 (5) 6+3=9 (6)

Per example illustrated in figure 1. Skill level 4 (10) Calculation numbers (3) 13,6,14,2 Solution number (4) 24 The complete mathematical question (2) answer being 13+14=27 (5)   6/2=3 (5) 27-3=24 (6)

A player, upon solving the unique mathematical question (2) will first declare "Solved it" then declare the unique mathematical question (2) complete solution (5)(6)

In the event of a plurality of correct answers being possible, all correct answers will be acceptable.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A mathematical problem solving game, comprising a specialized deck of cards, each of specialized cards, having an upper surface display of a number of unique mathematical questions, each unique mathematical question being formulated in a fixed format that requiring that each unique mathematical question be solved in a fixed format that involves 3 sums.

2. Mathematical Problem Solving Game of claim 1 wherein points awarded competitors related to solving a unique mathematical question, are subject to the following rules:

- a rule that multiplication, division, subtraction and addition may be required in the solving of a unique mathematical question.

- a rule that requires a single card from the deck of specialized cards of claim 1 be positioned with the upper surface in view of an unlimited number of players, in order to initiate the start of the mathematical problem solving game of claim 1.

- a rule that on the upper surface of a specialized card from the deck of specialized cards of claim1 a fixed format of four calculation numbers and one solution number are displayed as a unique mathematical question, competitors are required to calculate the said questions answer in a fixed format, whereby two sums are created, each of the said two sums to consist of two numbers in a manner that utilizes each of the four calculation numbers a single time, with the object being, that the resulting answers to the said two sums, are such that they can be formed into a third sum, to provide the correct solution to the unique mathematical question displayed, whereby the said third sum answer, equals the solution number provided in the associated unique mathematical question.

- a rule that players pre-select their desired skill level of play, as identified on the upper face of a specialized card from the specialized deck of cards of claim 1, prior to the initiation of the start of the Mathematical Problem Solving Game of claim 1..

- a rule permitting a question displayed on the specialized cards of claim1 to not have a solution, for purpose of establishing a first to declare "No possible solution."

- a rule that rewards, with points, the first player to either identify a solution, or to correctly identify "No possible solution".

- a rule that awards double points to a player that identifies a solution after a "No possible solution" has been declared by another competing player.

- a rule that if a player fails to disclose a correct solution following a declaration of "Solved it" remaining players are awarded points.

- a rule permitting a device to limit the time to solve a unique mathematical question..